

Appl. No. 09/724,910
Response to Office Action dated 08/09/05
Response dated February 9, 2006

REMARKS

Applicants wish to thank Examiner Whaley for granting Applicant, Hugh Pasika, the courtesy of an interview conducted February 3, 2006. During the interview possible claim amendments were discussed.

Claim Rejections – 35 U.S.C. § 102

I. Rejection based on Palsson

Examiner rejects claims 34, 38, and 42 as anticipated by Palsson et al. (*Using Quality Measure to Facilitate Allele Calling in High-Throughput Genotyping, Genome Research, Vol 9, p 1002-1012, October 1999.*) Examiner argues that Palsson performs a threshold test and thus anticipates the instant claimed invention.

Applicant believes that Examiner applies the term “threshold test” in a manner inconsistent with the instant application. Palsson’s threshold test involves applying numerical cutoffs to a series of values determined *after allele calls are made* in order to choose allele calls that surpass a quality metric. This is not the same as the threshold test discussed in claims 34, 38, and 42. Applicant’s threshold test refers to a test that is tuned to an allele calling algorithm in such a manner as to ascertain whether or not the data falls within the allele caller’s operating region. A caller’s operating region is defined as the data space where, that when operating on the data, the allele caller will produce a correct result with a high degree of certainty. Thus Applicant’s threshold test screens the data *prior to making allele calls* and in doing so can prevent processing of data that is likely to lead to an incorrect result from the allele caller. Applicant believes that because of this distinction, Palsson is incorrectly applied to the instant invention and request that the rejection be withdrawn. In order to bring clarity to the claims, Applicant withdraws existing claims 34, 38 and 42 and submits claims 46 (similar to claim 34), and 51 (similar to claim 42) that more clearly articulate the testing of the data prior to allele calling.

II. Rejection based on Perlin

Examiner rejects claims 34 through 45 under 35 USC § 102(e)(2) as being anticipated by Perlin (United States Patent #6,807,490; filed Feb 15, 2000; issued Oct 19,

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2004.) Similar to the arguments in the previous section Examiner argues that Perlin employs a threshold test to call alleles. Examiner argues that the claims “impl(y) that an allele call has been made,” and the “this has been done via a threshold test.” (page 6 of Examiner’s Office Action dated August 9, 2005.) As discussed above, Applicant’s threshold test does not perform the allele calling but rather serves to screen the data and remove data, that is likely to result in incorrect results from the allele caller, from consideration prior to allele calling. For at least this reason Perlin does not anticipate the instant invention and Applicant respectfully requests that the rejection be withdrawn.

Additionally, Examiner argues that the “panels” described in the instant invention correspond to the “DNA sizing windows” described by Perlin. DNA sizing windows are used only assign peaks to fragment lengths as articulated by Perlin where it mentions, “removing all peaks from the signal that ... have a DNA length that is not in a window of the allelic ladder.” (column 24 lines 43-45). The “panels” in the instant application are formed by reducing the dimensionality of the original signal, calculating its envelope, determining minima of the envelope and declaring panel boundaries based on those minima. Thus, discussion of “DNA sizing windows” by Perlin does not map onto the use of “panels” in the instant application. Application respectfully request that the rejection based on Examiner’s argument be withdrawn.

New Matter Rejection

Examiner rejects claims 35-37, 39-41, and 43-45 under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. Applicant traverses this rejection however, applicant submits new claims drawn to the same subject matter in order to bring clarity.

Provisional Obviousness-type Double Patenting Rejection

Examiner provisionally rejects claims 34, 38, and 42 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 3, 14, and 25 of copending Application No 09/911,903. Applicant notes that Application No. 09/911,903 is now abandoned rendering this rejection moot.

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Conclusion

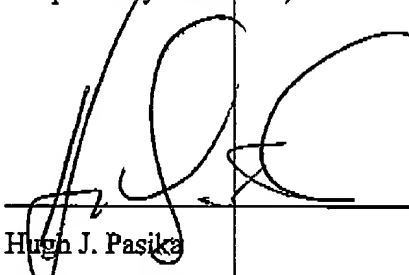
For at least the reasons stated, Applicant submits that the instant application is in condition for allowance and respectfully requests that all rejections be withdrawn.

FEE AUTHORIZATION and REQUEST FOR TIME EXTENSION

If any additional fees not submitted with this response are required, please take such fees from Applied Biosystems Deposit Account No. 01-2213 (Order No. 4615).

Respectfully submitted,

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